



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,110	12/26/2001	David R. Davis	450.232US2	1032

32710 7590 02/28/2006

Stites & Harbison PLLC
TransPotomac Plaza
1199 North Fairfax Street, Suite 900
Alexandria, VA 22314-1437

EXAMINER

CHANG, YEAN HSI

ART UNIT	PAPER NUMBER
----------	--------------

2835

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/034,110

Applicant(s)

DAVIS ET AL.

Examiner

Yean-Hsi Chang

Art Unit

2835

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,32-34,36-38 and 40-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,32-34,36-38 and 40-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3, 5-6, 34, 36, 44-46 and 48-51 are rejected under 35 U.S.C. 102(e) as being anticipated by Papa et al. (US 6,175,490 B1).

Papa teaches a cooling assembly (fig. 6) for at least one board (184, fig. 5) having mounted thereon a plurality of components (shown in fig. 4) including a first component (104) and a further component (another 104, fig. 4), comprising: a first passage (through 560), a first fan (566A) for passing air through the passage, an isolation assembly (560) for generally enclosing heat generated from the first component mounted on the at least one board, being enclosed within the isolation assembly, the isolation assembly containing at least a part of the first passage, and the isolation assembly being removably attachable to a computer case (100, fig. 4) without opening the computer case, a further passage (through another 104) configured to provide an air flow past the further component mounted on the at least one board

Art Unit: 2835

outside of the isolation assembly (see fig. 10), and a second fan (566A in 560 of another 104) for passing air through the further passage (claims 1 and 34); wherein the first passage includes a conduit (case 560) separate from the first and second fans (see figs. 4 and 5), in communication with the isolation assembly (claims 3 and 36); wherein the plurality of components are enclosed in a case (101), and air is drawn from outside (claims 5-6 and 38); an exhaust hole (see fig. 3B) in communication with the passage and suitable for venting air through the computer case (claims 44 and 48); an air path from the first fan through the exhaust hole passes through the first passage (claims 45 and 49); and wherein the cooling assembly is configured such that substantially all of the air passing through the first fan is vented through the exhaust hole (claim 46-47 and 50-51) .

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 32-33, 37 and 40-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Papa et al. in view of Behl (US 6,185,097 B1).

Regarding claims 4, 32, 37 and 40, Papa discloses the claimed invention except a passive heat sink operably coupled to the first component. Behl teaches a passive

Art Unit: 2835

heat sink (20) coupled to a component (150) for optimizing convective cooling. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the conduit of Papa with the heat sink taught by Behl for optimizing convective cooling.

Regarding claims 33 and 41, Papa discloses the claimed invention except indicating the isolating assembly being configured to shield the first component from an amount of EMI. Behl teaches an EMI shield 28 conforms in shape to a conduit 26. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the conduit of Papa with the EMI shield taught by Behl for shielding EM interferences.

Regarding claims 42 and 43, Papa further teaches an isolation assembly 103 comprising a processor, however, Papa fails to teach the isolation assembly 103 including a fan for cooling. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the isolation assembly 103 with a fan for better cooling purposes, since most processors in a computer system need cooling.

Response to Arguments

5. Applicant's arguments with respect to claims 1 and 34 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yean-Hsi Chang whose telephone number is (571) 272-2038. The examiner can normally be reached on 07:30 - 16:00, Monday through Thursday.

Art Unit: 2835

If attempts to reach the examiner by telephone are unsuccessful, the Art Unit phone number is (571) 272-2800, ext. 35. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-8558.

Yean-Hsi Chang
Primary Examiner
Art Unit: 2835
February 23, 2006



YEAN-HSI CHANG
PRIMARY EXAMINER